

CHAPTER 8. AIRPORT HEIGHT ZONING

a. Definition of Airspace to be Protected

Airport height zoning ordinances are typically based entirely upon the provisions of Part 77 of the Federal Aviation Regulations, Objects Affecting Navigable Airspace. FAA Advisory Circular 150/5190-4, which describes a model height zoning ordinance, utilizes Part 77 "surfaces" as the only criteria for height control.

The Part 77 surfaces defines "planes" which should not be penetrated by structures in the airport vicinity. If there is a penetration, restrictions may have to be placed on a specific phase of operations at the airport (increased take-off or landing minima, etc.). By establishing an ordinance to prohibit structures which violate the Part 77 surfaces, unrestricted use of the airport can be generally ensured.

In the course of development of the height zoning criteria, consideration was given to the inclusion of other means of height control. One of these included FAA Terminal Instrument Procedures (TERPS) departure surfaces, which provides additional protection for aircraft departing visual or nonprecision instrument runways during high temperature or altitude conditions. TERPS established 40:1 departure slopes from the departure ends of the runways, which are more restrictive than the 20:1 and 34:1 visual and nonprecision slopes, defined under Part 77 but less restrictive than 50:1 precision surfaces associated with ILS or MLS approach systems. TERPS protection is essential at airports with extensive instrument operations; however, at Deer Valley, with VFR weather in effect or over 99 percent of the time, and with the complexity of TERPS criteria in general, it was decided that inclusion of TERPS surfaces into the height zoning ordinance was not essential.

Application of Part 77 surfaces in the proposed ordinances is presented in two ways. A verbal description of the Part 77 surfaces is provided in Section 4 of the proposed ordinances, with a graphical drawing of the surfaces presented as Airport Height Zoning Map A (Figure B-1).

b. Geographic Jurisdiction of the Ordinance

The Part 77 Surfaces established at the Deer Valley Airport extend approximately 2 miles north of the Phoenix City Limits, into Maricopa County. The Uniform State Law of Aeronautics Arizona Revised Statutes, Airports and Airport Zoning, Section 2-324 includes a provision as follows:

B. When an airport is owned or controlled by a political subdivision and an airport hazard area is located without its territorial limits, the political subdivision owning or controlling the airport and the political subdivision within which the airport hazard area is located may, by ordinance or resolution, create a joint airport zoning board which shall have the same power to adopt, administer and enforce air-

port zoning regulations applicable to the airport hazard area as that vested by subsection A in the political subdivision within which the area is located.

The City has the option under this law, of establishing a joint airport zoning board with Maricopa County. It is recommended that the draft ordinance be applied only to the City of Phoenix at this time. This avoids the administrative difficulties of a joint board, and it is not expected that development requiring application of the ordinance, is likely to occur in the section of airspace which falls beyond the City boundary, until additional areas are annexed by the City. At that time they would become subject to the provisions of the ordinance.

Until that time, the FAA would routinely review proposed construction in the area under the "Notice of Construction or Alteration" requirements of Part 77, so any potential obstructions beyond the city boundary will be identified.

c. Text of Proposed Airport Height Zoning Ordinance

A draft ordinance incorporating these provisions appears as Appendix B to this report.